CLAIMS

1. A method of making a power transmission belt/belt sleeve comprising a body with a continuous length extending around an axis, an inside, an outside spaced radially from the inside, and at least one of a) a plurality of ribs and b) a plurality of cog teeth spaced at lengthwise intervals on one of the inside and outside of the belt/belt sleeve, said method comprising the steps of:

forming a first belt/belt sleeve component comprising a compression rubber layer;

applying a radial force to the first belt/belt sleeve component so as to urge the first belt/belt sleeve component against a mold surface and thereby forming the at least one of the plurality of ribs and plurality of cog teeth in the first belt/belt sleeve component;

forming a second belt/belt sleeve component comprising at least a part of a cushion rubber layer and a load carrying member; and

after forming the at least one of the plurality of ribs and plurality of cog teeth on the first belt/belt sleeve component, joining the first and second belt/belt sleeve components to each other.

2. The method of making a power transmission belt/belt sleeve according to claim 1 wherein the step of applying a radial force comprises applying a force on the first belt/belt sleeve component in a radially outward direction.

3. The method of making a power transmission belt/belt sleeve according to claim 2 wherein the step of joining the first and second belt/belt sleeve components comprises laminating the first and second belt/belt sleeve

components while exerting a force on the second belt/belt sleeve component in a radially outward direction.

4. The method of making a power transmission belt/belt sleeve according to claim 1 wherein the step of forming a first belt/belt sleeve component comprises providing short fibers, each with lengths, in the compression rubber layer so that the lengths of the short fibers are oriented to extend generally in an axial direction.

5. The method of making a power transmission belt/belt sleeve according to claim 1 wherein the step of forming the first belt/belt sleeve component comprises joining a second part of the cushion rubber layer to the compression rubber layer.

6. The method of making a power transmission belt/belt sleeve according to claim 5 wherein the step of joining the second part of the cushion rubber layer comprises joining the second part of the cushion rubber layer at a radially inside location on the compression rubber layer, and the step of forming the second belt/belt sleeve component comprises joining the load carrying member at a radially outside location to the at least part of the cushion rubber layer.

7. The method of making a power transmission belt/belt sleeve according to claim 1 wherein the step of forming the at least one of the plurality of ribs and plurality of cog teeth comprises forming the at least one of the plurality of ribs and plurality of cog teeth against the mold surface on a first mold assembly,

the step of forming the second belt/belt sleeve component comprises forming the second belt/belt sleeve component against a second mold assembly, and the step of joining the first and second belt/belt sleeve components comprises joining the first and second belt/belt sleeve components with the first and second mold assemblies residing one within the other.

8. The method of making a power transmission belt/belt sleeve according to claim 7 wherein the step of forming the second belt/belt sleeve component comprises forming the second belt/belt sleeve component with the second mold assembly separated from the first mold assembly.

9. The method of making a power transmission belt/belt sleeve according to claim 8 wherein the step of forming the at least one of the plurality of ribs and plurality of cog teeth against the first mold assembly comprises forming the at least one of the plurality of ribs and plurality of cog teeth with the first and second mold assemblies residing one within the other.

10. The method of making a power transmission belt/belt sleeve according to claim 9 wherein the step of forming the at least one of the plurality of ribs and plurality of cog teeth comprises the steps of providing a bladder assembly with a bladder element between the first and second mold assemblies and repositioning the bladder element so that the bladder element applies a radially outwardly directed force to the first belt/belt sleeve component.

11. The method of making a power transmission belt/belt sleeve according to claim 10 wherein the step of applying a radial force on the first

belt/belt sleeve component comprises generating a low pressure region that causes a suction force to be developed through the mold surface that urges the first belt/belt sleeve component against the mold surface.

12. The method of making a power transmission belt/belt sleeve according to claim 10 wherein the step of providing a bladder assembly comprises providing a bladder assembly on the second mold assembly.

13. The method of making a power transmission belt/belt sleeve according to claim 10 wherein the step of repositioning the bladder element comprises directing a fluid under pressure against the bladder element.

14. The method of making a power transmission belt/belt sleeve according to claim 1 further comprising the step of heating the mold surface as the radial force is applied to the first belt/belt sleeve component to facilitate formation of the at least one of the plurality of ribs and plurality of cog teeth.

15. The method of making a power transmission belt/belt sleeve according to claim 11 further comprising the step of heating the mold surface as the radial force is applied to the first belt/belt sleeve component to facilitate formation of the at least one of the plurality of ribs and plurality of cog teeth.

16. The method of making a power transmission belt/belt sleeve according to claim 1 further comprising the step of cutting the belt/belt sleeve to produce a power transmission belt having a desired width.

17. The method of making a power transmission belt/belt sleeve according to claim 1 wherein the step of forming the second belt/belt sleeve component comprises forming the entire cushion rubber layer as a part of the second belt/belt sleeve component.

18. A power transmission belt/belt sleeve made according to the method of claim 1.

19. A power transmission belt comprising:

an endless body with a length, an inside, an outside, and laterally spaced sides,

the endless body further comprising a compression rubber layer, a cushion rubber layer, and at least one load carrying member embedded in the cushion rubber layer,

the endless body further comprising at least one of a) at least one rib extending in a lengthwise direction and b) a plurality of cog teeth spaced at lengthwise intervals,

the rubber in the at least one of the at least one rib and plurality of cog teeth having a flow state induced during formation of the at least one of the at least one rib and plurality of cog teeth,

wherein at least a part of the cushion rubber layer is unaffected by the flow state induced during formation of the at least one of the at least one rib and plurality of cog teeth,

wherein the at least one load carrying member has a rate of elongation less than or equal to 1.5%.

20. The power transmission belt according to claim 19 wherein the at least one load carrying member has rate of elongation less than or equal to 1.2%.

21. The power transmission belt according to claim 19 wherein there is a plurality of short fibers in the compression rubber layer.

22. The power transmission belt according to claim 19 wherein there is a plurality of short fibers each having a length embedded in the compression rubber layer and the lengths of the plurality of fibers are generally oriented to extend at right angles to the length of the body.

23. The power transmission belt according to claim 19 wherein the flow state is induced by pressure application during formation in a direction between the inside and outside of the body.

24. The power transmission belt according to claim 19 wherein a part of the cushion ruber layer is affected by the flow state induced during formation of the at least one of the at least one rib and plurality of cog teeth.